

CONTAINER CAPACITOR STRUCTURE
AND METHOD OF FORMATION THEREOF

ABSTRACT OF THE DISCLOSURE

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Disclosed is a container capacitor structure and method of constructing it. An etch mask and etch are used to expose portions of an exterior surface of electrode ("bottom electrodes") of the container capacitor structure. The etch provides a recess between proximal pairs of container capacitor structures, which recess is available for forming additional capacitance. Accordingly, a capacitor dielectric and a top electrode are formed on and adjacent to, respectively, both an interior surface and portions of the exterior surface of the first electrode. Advantageously, surface area common to both the first electrode and second electrodes is increased over using only the interior surface, which provides additional capacitance without a decrease in spacing for clearing portions of the capacitor dielectric and the second electrode away from a contact hole location. Furthermore, such clearing of the capacitor dielectric and the second electrode portions may be done at an upper location of a substrate assembly in contrast to clearing at a bottom location of a contact via.